

- 445
A1*
1. A method for tracking for a vehicle, trip data in relation to geographic position, said method comprising:
recording trip data periodically and time stamping each periodic recording;
recording geographic position periodically and time stamping each recording;
saving the time stamped trip data and geographic position in a database; and
graphically displaying the recorded trip data and the recorded geographic position as a function of time, from the database.
 2. The method of claim 1 wherein choosing an instant in time causes corresponding recorded trip data and recorded geographic position to be displayed.
 3. The method of claim 1 wherein choosing a geographic position causes temporally corresponding recorded trip data to be displayed.
 4. The method of claim 1 further comprising:
predetermining trip events;
electronically monitoring trip data;
recording trip data and geographic position when trip data indicates a trip event is occurring, thereby recording data for the event rather than waiting for a next period of one of the periodic recordings to initiate recording; and
transmitting the recorded trip data and geographic position to the database.
 5. The method of claim 4 wherein the graphically displayed trip data and geographic position from recording as a result of a trip event is displayed differently than the graphically displayed trip data and geographic position from periodic recording.

6. The method of claim 4 further comprising graphically displaying only the event trip data.

7. The method of claim 1 wherein a method for graphically displaying geographic position is further comprising:

recording geographic position periodically in terms of latitude and longitude; and
plotting the geographic position on a map containing latitude and longitude information.

8. The method of claim 1 wherein the periodic recording of trip data is based on a periodic interval of time and the periodic recording of geographic position is based on a periodic interval of distance.

9. A system for tracking for a vehicle, trip data in relation to geographic position, said system comprising:

a recording means for recording trip data periodically and geographic position periodically;

a time stamping means for time stamping trip data and geographic position as each is recorded;

a database means for storing recorded trip data and recorded geographic position; and

a graphical display means for displaying the recorded trip data and the recorded geographic position as a function of time, from the database.

10. The system of claim 9 wherein choosing an instant in time causes corresponding recorded trip data and recorded geographic position to be displayed.

11. The system of claim 9 wherein choosing a geographic position causes temporally corresponding recorded trip data to be displayed.
12. The system of claim 9 further comprising:
- a monitoring means for continuously monitoring trip data;
- predetermined trip events; and
- a comparison means for comparing monitored trip data to predetermined trip events and, when a match is found, signaling the recording means to record and time stamp trip data and geographic position, whereby the recording for the predetermined trip events is indifferent to the periodic recording of trip data and vehicle position.
13. The system of claim 12 wherein the graphically displayed trip data and geographic position from data recorded as a result of a trip event is displayed differently than the graphically displayed trip data and geographic position from periodic recording.
14. The system of claim 12 further comprising a graphical display option for graphically displaying only the event trip data.
15. The system of claim 9 wherein geographic position is recorded in terms of latitude and longitude and the graphical display means plots the geographic position on a map containing latitude and longitude information.
16. The system of claim 9 wherein the periodic recording of trip data is based on a periodic interval of time and the periodic recording of geographic position is based on a periodic interval of distance.
17. An apparatus for tracking for a vehicle, trip data in relation to geographic position, said apparatus comprising:
- a speedometer;

a tachometer;
a trip data recording device for periodically recording speedometer and tachometer readings with a time stamp for each reading;
a global positioning device;
a position recording device for periodically recording output from the global positioning device with a time stamp for each periodic recording;
a database for storing recorded data and positions;
a graphic display device for displaying the trip data and position, from the recorded trip data and recorded positions stored in the database, as a function of time.

18. The apparatus of claim 17 wherein choosing a geographic position causes temporally corresponding recorded trip data to be displayed.